Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	CC Docket No. 93-292
Policies and Rules	)	
Concerning Toll Fraud	)	

REPLY COMMENTS OF McCAW CELLULAR COMMUNICATIONS, INC.

E. Lee Kaywork
Corporate Vice President -
Revenue Requirements
Cathleen A. Massey
Senior Regulatory Counsel
McCaw Cellular Communi-
cations, Inc.
1150 Connecticut Ave., N.W.
Washington, D.C. 20036

R. Michael Senkowski
Katherine M. Holden
WILEY, REIN & FIELDING
1776 K Street, N.W.
Washington, D.C. 20006

Its Attorneys

February 10, 1994

TABLE OF CONTENTS

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	CC Docket No. 93-292
Policies and Rules	)	
Concerning Toll Fraud	)	

REPLY COMMENTS OF McCAW CELLULAR COMMUNICATIONS, INC.

McCaw Cellular Communications, Inc. ("McCaw"), by its attorneys, hereby submits its reply comments with respect to the Notice of Proposed Rulemaking in the above-captioned docket.[1] Consistent with McCaw's expectations, the Notice prompted a range of recommendations for Commission action. As detailed below, the Commission should act to ensure that participants in the telecommunications marketplace have full incentives to take all available actions to prevent the occurrence of fraud. When the inevitable fraud does occur, liability should be apportioned consistent with the principles enunciated below.

I. SUMMARY

The Notice has resulted in the submission of over 100 comments, a number of which address steps for preventing and detecting cellular fraud and for allocating the resulting losses. Unfortunately, a number of parties have sought to shift responsibility for all losses associated with the fraudulent

---

[1] FCC 93-496 (Dec. 2, 1993) ("Notice"). Opening comments were due on January 14, 1994. McCaw submitted its initial comments on the proposals contained in the Notice at that time.

usage of cellular telephones to facilities-based cellular carriers. This effort ignores the fact that assignment of some responsibility for fraud losses to other categories of service providers maximizes the incentives for all participants to take steps to minimize the occurrence of fraud.

Consistent with an underlying purpose of maximizing such incentives, the Commission must reject the arguments of interexchange carriers ("IXCs") that losses associated with the interexchange portion of a call involving a cellular handset must in all cases be allocated to the cellular carrier. Instead, in an equal access market, the IXC should bear its appropriate burden as outlined in McCaw's original comments.

With respect to roaming fraud, allocation of losses should continue to be addressed in the contracts individually negotiated between the carriers. These agreements can effect a rational, efficient assignment of responsibility while ensuring the existence of incentives for both parties to the agreement to take steps to detect and prevent fraudulent cellular usage.

Cellular resellers should continue to be responsible for fraudulent charges associated with the telephone numbers assigned for their use. Allocation of responsibility to each carrier -- facilities-based or reseller -- for the numbers associated with its customers is a rational approach.

The record also clearly supports Commission action to pursue the enactment of legislation that makes fraudulent usage of

telecommunications services and facilities -- including cellular -- a federal crime. The Commission also should encourage increased cooperation among carriers in providing information in connection with the investigation of potentially fraudulent telecommunications usage.

The ability of cellular carriers to deploy effective validation mechanisms must be maintained and enhanced where possible. The Commission should therefore ensure that its rules and policies underscore the impermissibility of equipment, software, or other techniques for altering the electronic serial number ("ESN") transmitted by a cellular telephone. Moreover, the Commission should have the tools to actively enforce these policies.

Finally, the Commission should continue to promote the distribution of information throughout the telecommunications industry and specifically to users to combat telecommunications fraud. At the same time, however, there is no reason to mandate the distribution of information by carriers to their subscribers, since carriers already have great incentive to undertake all useful mechanisms to minimize the occurrence of fraud.

II. THE EFFORTS OF A NUMBER OF CARRIERS TO EVADE ANY RESPONSIBILITY FOR TELECOMMUNICATIONS FRAUD AND TO SHIFT THE LIABILITY TO OTHERS MUST BE REJECTED

Not surprisingly, a number of the commenters in this proceeding take the position that someone else -- but not them --

should be held responsible for the losses associated with toll fraud. This self-interested rejection of public interest obligations simply should not be accepted by the Commission.

As pointed out by GTE, the efforts of the Commission, carriers, manufacturers, users, and all other interested parties should be targeted at the prevention of fraud.[2] Even when completely successful, however, such activities will not be able to prevent all occurrences of fraud.[3] Thus, the telecommunications industry will always be confronted with losses stemming from the fraudulent use its facilities.

In recognition of this fact, the Commission must strive to ensure that responsibility for such fraud is allocated in accordance with two principles. First, the allocation rules must ensure that all carriers and all other participants in the telecommunications marketplace have all possible incentives to take available steps to limit the occurrence of fraud. Second, as McCaw pointed out in its opening comments, carriers should bear responsibility for the fraudulent use that they can monitor, detect or control or where they have a direct customer/carrier relationship with the user.[4]

In the cellular context, three groups of commenters are attempting to absolve themselves of fraud losses in contradiction

---

[2] GTE at 3-4. See also PacBell at 2-3.

[3] See, e.g., PacBell at 3-4.

[4] See, e.g., Vanguard at 5-6.

to these principles. First, certain interexchange carriers have asserted that they should bear no liability whatsoever for fraudulent calls employing cellular and interexchange facilities. Second, a cellular operator seeks to shift roaming fraud liability to serving carriers. Finally, resellers of cellular service similarly seek to be absolved of any responsibility whatsoever. As demonstrated below, the Commission must reject attempts to achieve blanket exemption from liability for toll fraud and instead should allocate responsibility to these carriers in accordance with the principles outlined below.

A. Interexchange Carriers

MCI takes the position that "IXCs should not be held liable for fraudulent cellular calls because the fraud occurs in the cellular network, and IXCs have no ability to determine whether a cellular call passed through to them is fraudulent."[5] AT&T takes a similar position, asserting that "liability for fraudulent IXC network calls from cloned phones appropriately rests upon the cellular carriers who allow such calls to reach the IXC networks."[6]

---

[5] MCI at 13. MCI further asserts that "[c]ellular fraud primarily results from deficiencies in cellular network and equipment standards." Id. at 12.

[6] AT&T at 30. AT&T further states: "In all events, the costs of cloning fraud result solely from the use of cellular technology. Therefore, the costs of such fraud should be borne by the cellular carriers and their subscribers who use that technology, rather than the IXCs and their customers." Id. at

The efforts of interexchange carriers to absolve themselves of any loss responsibility even where the cellular subscriber is also a direct customer of the IXC must be rejected. This perspective is valid only in the situation recognized by McCaw in its opening comments[7] and discussed by AT&T -- where "non-wireline cellular carriers . . . purchase IXC services in bulk and provide bundled cellular/IXC services."[8] In that situation, the IXC has no direct relationship with the end user and thus no independent opportunity to monitor and detect fraudulent usage of the portion of the communication carried over its own network.

In contrast, however, the IXCs must be held liable for the interexchange portion of fraudulent calls originating in cellular service areas where equal access arrangements are in effect. In these cellular markets, the IXC has a direct customer relationship with the end user, and customer identification information is passed from the cellular carrier to the IXC. The IXC thus has the same opportunity to monitor, detect and prevent the fraud as the cellular operator. Accordingly, to the extent that the IXC does not act to prevent the fraudulent usage, it must be held responsible.

Claims by the IXCs that, even in an equal access environment, they should not share in the responsibility for

---

31.

[7] McCaw at 13-14.

[8] AT&T at 30 n.42.

fraudulent cellular calls have no supportable basis.[9] In cellular markets with equal access, the IXCs are knowing providers of interexchange service to cellular customers. The IXCs chose to take part in the equal access balloting, with full knowledge of the risks and limitations inherent in the cellular technology and their provision of service to cellular users. These carriers thus cannot now be heard to complain about the allocation of cellular fraud responsibility.

To the extent that a cellular phone is counterfeited (or "cloned"), an interexchange carrier has the same ability to detect the problem as a cellular carrier. Indeed, it has been McCaw's experience that IXCs have notified McCaw of possible fraudulent activity when they have noticed spikes in international calling or long distance calling within certain blocks of cellular numbers. If IXCs no longer share in fraud losses, their incentives to monitor and report cellular-related fraud will be extinguished.

Contrary to AT&T's suggestion, the principal "losses" for cellular carriers are not limited to airtime on their own networks.[10] Cellular carriers, for example, must pay interconnection charges to local exchange carriers. Cellular

---

[9] See also SWB at 10.

[10] See AT&T at 31. McCaw recognizes that IXCs are confronted with out-of-pocket costs in the case of fraudulent calls -- but that is no justification for allowing IXCs with independent customer relationships with the cellular user to evade their properly allocated responsibilities.

operators, like IXCs, also are confronted with billing and collections costs. In addition, as explained in McCaw's opening comments, fraudulent cellular usage may require the carrier to make system modifications and capital expenditures that otherwise would not be required.[11] As McCaw summarized the situation, "[c]ellular fraud, therefore, results in a direct loss of revenues, increases capital costs, and diverts resources from services for legitimate customers."[12]

B. Cellular Carriers/Roaming

Vanguard states that, under the standard roaming agreements used in the cellular industry, "a carrier is responsible for paying for all roamer calls made by cellular phones with numbers in the range assigned to that carrier, whether or not the calls are legitimate."[13] Vanguard further asserts that "[t]he home carrier . . . has little ability to monitor or prevent fraudulent calls that take place on an another carrier's system" and that "[t]he carrier providing service does have the ability to detect and prevent fraudulent calls . . . but has little incentive to do so because the serving carrier is entitled to full payment even for fraudulent calls."[14] Vanguard's comments implicitly suggest

---

[11] See McCaw at 7.

[12] Id.

[13] Vanguard at 6.

[14] Id.

that the serving carrier -- at least in "high fraud areas" -- should be assigned liability for fraudulent usage associated with roaming calls.[15]

McCaw disagrees with Vanguard's description of existing circumstances and incentives as well as its suggested solution. Vanguard excessively credits the ability of the serving carrier to detect fraudulent calls and underestimates the steps that can be taken by the home carrier. For example, third party vendors offer the ability to monitor the carriers' customers' usage on a near real time basis while they are roaming. This enables the home carrier to protect itself and its customers from excessive exposure to fraud. EDS offers a real-time monitoring product that allows carriers to monitor their customers in other markets.[16]

As Vanguard correctly observes, the allocation of responsibility for fraudulent roaming calls is currently a matter of agreement between carriers. McCaw believes that these negotiated arrangements should not only be permitted but should be encouraged, as a rational approach to liability allocation. These negotiations among carriers also should provide the signatories with appropriate incentives to take steps --

---

[15] See id. at 7.

[16] In addition, Vanguard's argument that small carriers cannot economically protect themselves is not compelling. There are many simple but effective solutions to monitoring, such as billing programs that read billing tapes from the switch and that can be developed in-house for less than $20,000.00.

including joint activities -- to prevent the occurrence of the fraud.

C. Resellers

NCRA argues that resellers of cellular service should not be held liable for fraudulent charges associated with the cellular numbers assigned for their use.[17] Contrary to their usual claims for treatment as carriers, the cellular resellers now seek to be regarded as customers of the facilities-based cellular system for purposes of fraud responsibility allocation.

As NCRA observes, the counterfeiting of cellular telephone numbers is unpredictable, with customers of the reseller as well as direct customers of the cellular carrier itself being randomly affected by this activity. To that extent, facilities-based operators have no more control over the occurrence of the fraudulent activity than a reseller. Nonetheless, the costs of the fraud must be covered. Allocation of responsibility to each common carrier -- facilities-based or reseller -- for the numbers associated with its customers is a rational approach, even if the resellers do not want to shoulder their portion of the burden.

Moreover, the reseller customer has a subscriber relationship only with the reseller, and not with the underlying

---

[17] E.g., NCRA at 3.

carrier.[18] In many cases, the cellular operator cannot readily detect whether subscriber phone numbers are associated with direct customers or with the customers of a reseller. Indeed, carriers and resellers should work together to identify fraud in their markets.

By granting the relief requested by NCRA, the Commission would remove the incentive for resellers to take a more active role in preventing and detecting fraud. As McCaw and others have repeated, the Commission's liability policies must ensure that all participants in the telecommunications marketplace have full incentives to undertake all feasible steps for preventing the occurrence of fraud in the first place.

III. THE RECORD SUPPORTS THE NEED FOR STATUTORY REVISIONS TO ASSIST IN THE SUCCESSFUL PREVENTION, DETECTION, AND PROSECUTION OF FRAUDULENT TELECOMMUNICATIONS USE

The vast majority of commenters in this proceeding recognize the need for new legislation at the federal level to make telecommunications fraud a clear crime.[19] McCaw supports NYNEX's

---

[18] Indeed, cellular resellers have often been quick to complain if they suspect the facilities-based carrier of directly contacting a customer of the reseller.

[19] E.g., AT&T at 37-38; Bell Atlantic at 11; BellSouth at 10-11; CTIA at 9-12; GTE at 15, 30-31; MCI at 19-21; NYNEX at 23-24; SNET at 11-12; SWB at 9; Sprint at 2; Vanguard at 10-11.

recommendation that 19 U.S.C. § 1029 be amended "to make it a crime to:

(a) knowingly and with intent to defraud possess a cellular telephone in violation of Section 22.929 of the FCC's Rules and Regulations; and

(b) knowingly and with intent to defraud possess a scanning receiver of cellular telecommunication transmission or hardware and/or software used for altering cellular telephones in violation of 47 U.S.C. 302a(d)."[20] In addition to action at the federal level, as Vanguard points out, "the FCC should encourage state legislatures and regulatory authorities to adopt and enforce stringent criminal and other measures to combat telecommunications fraud."[21]

In addition, MCI has suggested certain statutory changes to facilitate the provision of information to law enforcement authorities as well as other carriers in the context of fraud investigations.[22] MCI also shares McCaw's concern about the unwillingness of some carriers to cooperate in the investigation of potentially fraudulent activities.[23] To address this aspect of the problem, MCI urges the Commission to promulgate policies and rules (if necessary) to require the exchange of customer

---

[20] NYNEX at 23-24.

[21] Vanguard at 11. See also CTIA at 10 n.15.

[22] MCI at 20-21.

[23] See also, e.g., PacBell at 20.

information among carriers in certain situations. Consistent with McCaw's own articulated views, McCaw supports MCI's proposals, and urges the Commission to facilitate and encourage cooperative activities in the investigation of potentially fraudulent activities.[24]

IV. THE COMMISSION SHOULD ENSURE THAT EQUIPMENT OR SOFTWARE THAT MAY BE USED TO DUPLICATE EXISTING ESN/MIN INFORMATION IS BARRED UNDER ITS RULES AND POLICIES

In its opening comments, McCaw highlighted the need for cellular and other wireless carriers to be able to employ effective validation processes as part of their steps in insuring billing integrity and successful anti-fraud programs.[25] In connection with that discussion, McCaw addressed the activities of a particular company in creating "cellular extension phones" by employing an NAM Emulation Programming Device to override the installed ESN of one cellular phone with the ESN of another cellular telephone.[26]

---

[24] See also, e.g., GTE at 29-30; PacBell at 20-21; SNET at 12.

[25] See, e.g., CTIA at 5; SNET at 13.

McCaw also agrees with BellSouth that, "[a]mong those security measures which should be available to the cellular carrier is the right to deny authorization for the issuance of calling cards bearing a cellular number." BellSouth at 10.

[26] See McCaw at 9-12.

McCaw's concerns and its request that the Commission take all steps to bar the deployment of techniques that can be used to override or otherwise alter the ESN or MIN of a cellular telephone are confirmed by the record.[27] These parties underscore the problems that can result, even where the stated purpose of the activity is allegedly legitimate. Moreover, even when the devices or other technology may have appropriate uses, they can be readily subverted in order to facilitate fraudulent telecommunications usage.

The record accordingly supports the Commission taking prompt action to make clear that these devices and technologies are clearly by FCC rules.[28] In addition to adoption of the provisions contained in Section 22.929 previously proposed by the Commission, McCaw concurs in the further modifications urged by NYNEX -- that "the ESN chip be secured to the frame of the radio and attached to the logic board by cable;" "the software should be encoded and/or scattered over different memory chips;" and "only the original manufacturer's installed ESN is transmitted."[29] Moreover, enforcement of such rules should be

---

[27] See, e.g., CTIA at 5-8; NYNEX at 2; Vanguard at 8-10.

[28] See, e.g., Bell Atlantic at 11-12; BellSouth at 11; CTIA at 7; NYNEX at 23; SWB at 9; Sprint at 13; Vanguard at 9-10.

[29] NYNEX at 23.

swift and certain, with substantial forfeitures applied to any entity continuing to deploy these techniques.[30]

V. THE DISTRIBUTION OF INFORMATION IS IMPORTANT IN THWARTING TELECOMMUNICATIONS FRAUD BUT IS A MATTER BETTER LEFT TO THE DISCRETION OF EACH CARRIER

There is general consensus in the record that the distribution of information to the users of telecommunications service and equipment is indispensable in the battle on fraud. Some parties suggest that the Commission should require carriers to distribute fraud information to their customers on some periodic basis.

McCaw agrees that the provision of information to users is a critical tool in the effort to combat fraudulent cellular usage. It is also true, however, that cellular carriers already have substantial incentives to provide this information to existing and potential customers. Otherwise, the cellular carrier itself will be the one to absorb the costs associated with fraudulent usage. Moreover, the education of customers can be viewed as an element of providing a superior service to the public in the context of a competitive marketplace. Thus, while it may be appropriate for the Commission to exhort carriers to undertake appropriate informational campaigns, such programs should not be mandated.[31]

---

[30] See, e.g., CTIA at 7-8; NYNEX at 23; Vanguard at 10.

[31] See also, e.g., Sprint at 6; U S West at 29.

VI. CONCLUSION

As recognized in the Notice and supported by the comments in this proceeding, cellular fraud is a very serious problem. Cellular operators have, out of necessity, taken a number of steps on their own and through joint industry mechanisms. Commission action consistent with the principles outlined by McCaw would aid in achieving additional deterrence. McCaw accordingly urges the Commission to act promptly to minimize fraudulent use of cellular and other telecommunications facilities.

Respectfully submitted,

McCAW CELLULAR COMMUNICATIONS, INC.

By: Cathleen A. Massey (KAH) By: Katherine M. Holden

E. Lee Kaywork
Corporate Vice President -
Revenue Requirements
Cathleen A. Massey
Senior Regulatory Counsel
McCaw Cellular Communi-
cations, Inc.
1150 Connecticut Ave., N.W.
Washington, D.C. 20036
(202) 223-9222

R. Michael Senkowski
Katherine M. Holden
WILEY, REIN & FIELDING
1776 K Street, N.W.
Washington, D.C. 20006
(202) 429-7000

Its Attorneys

February 10, 1994

Comment Abbreviations Used in Text

AT&T: American Telephone and Telegraph Company

Bell Atlantic: Bell Atlantic

BellSouth: BellSouth Telecommunications, Inc. and BellSouth Cellular Corporation

CTIA: Cellular Telecommunications Industry Association

GTE: GTE Service Corporation

MCI: MCI Telecommunications Corporation

NCRA: National Cellular Resellers Association

NYNEX: NYNEX Corporation

PacBell: Pacific Bell and Nevada Bell

SNET: Southern New England Telecommunications Corporation

SWB: Southwestern Bell Corporation

Sprint: Sprint Corporation

U S West: U S West Communications, Inc.

Vanguard: Vanguard Cellular Systems, Inc.